

YSN ACTIVISTS ELECTED TO APS COUNCIL; SCHRIEFFER IS NEW VICE PRESIDENT

The American Physical Society's annual election produced an upset this year, in that seats on the council were won by two physicists associated with the Young Scientists Network, the electronic bulletin board that provides information on job opportunities and serves as a forum for discussion of the difficult employment situation (see PHYSICS TODAY, May 1993, page 57).

The two YSN physicists elected to the council are Kevin D. Aylesworth, the founder of YSN, and Zachary H. Levine, the main organizer of the petition drive that got four YSN members on the ballot. The two other YSN-connected candidates, one for the council and one for chair of the nominating committee, were not elected.

J. Robert Schrieffer, University Professor at the University of Florida and Florida State University, was elected to the 1994 vice presidency. The APS president in 1994 will be Burton Richter, director of the Stanford Linear Accelerator Center, and the president-elect will be C. Kumar N. Patel, who is vice chancellor for research at the University of California, Los Angeles. Schrieffer will be president-elect in 1995 and president in 1996.

James S. Langer of the University of California, Santa Barbara, was elected chair of the nominating committee. Langer and Schrieffer were associates for many years at the NSF-supported physics theory institute at Santa Barbara.

Election details

Levine, a University of Pennsylvania PhD who works with the electronic structure algorithms group at Ohio

State, having followed the group there from Cornell, reports that he put about 100 hours into the petition drive that got the YSN candidates on the ballot. Levine worked especially closely with the two unsuccessful YSN candidates, Norman H. Barth, a senior researcher at the European Center for Research and Advanced Training in Scientific Computing in Toulouse, France, and Michael Cohen, an unemployed physicist currently living in New Mexico.

The petition organizers rather easily got some 600 signatures, at least a third more than the 1% of membership needed, relying first on friends and acquaintances and then on volunteers to circulate petitions. Turnout in the election apparently was about as usual: Barely more than 20% of the APS members who were sent ballots returned them.

In the races for the council, the victories of the YSN insurgents have been interpreted as a choice of youth over age and of activism over establishment credentials. APS members picked the two YSN activists in preference, for example, to several very senior and well-known industrial research leaders.

In his candidate's statement, Aylesworth took the National Science Foundation to task for having issued misleading information about the employment market in physics. "Although many leaders in the physics community are sensitive to the unique problems of physicists in my generation, it is not clear that our issues have received adequate attention," he said. "I believe the best way to ensure our voices are heard is for more young physicists to get involved

in the governance of our professional societies."

Levine drew attention in his statement to the growing numbers of physics PhDs awarded between 1975 and 1992 and to the decline in research jobs at major industrial labs. He suggested, among other things, that we should "limit the growth of the physics community in the US to sustainable levels," find "help for young scientists who wish to make a transition out of physics," and get departments to introduce "an 'industrial minor' in areas complementary to academic research."

Levine is among those named to a task force on employment problems facing new PhDs that the APS executive board created shortly after the election. The other members are Kurt Gottfried (Cornell), Daniel Kleppner (MIT), Daniel J. Larson (University of Virginia), Brian Schwartz (APS and Brooklyn College) and Harry L. Swinney (University of Texas).

Kleppner, the unsuccessful candidate in the vice presidential race, has been one of the most active APS members in spurring generation of data on the employment situation and seeing that employment issues are addressed—though this may not be well known to the general membership. Kleppner is the current chair of the APS physics planning committee, and he initiated biennial surveys of academic supply and demand in subfields.

Schwartz, himself a non-establishment candidate two-and-a-half decades back, also has played an important role in catalyzing and coordinating labor market research.

The other two individuals who won general councillor seats are Elsa



Zachary H. Levine



Kevin D. Aylesworth



James S. Langer



Elsa M. Garmire

America, and Anthony M. Johnson, a member of the photonics circuits research department at AT&T Bell Labs, Holmdel. Garmire obtained by far the largest number of votes of any candidate in the election.

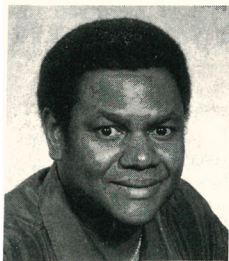
Coincidentally or not, all the candidates elected this year are associated with condensed matter or optoelectronics. And ironically or, if you will, serendipitously, official release of the election results by APS coincided with the defeat in the US Congress of the Superconducting Super Collider—the end of a battle that has left some acrimony between the condensed matter and elementary particle communities, and an outcome that is bound to aggravate employment problems for young particle physicists.

Schrieffer testified to Congress in favor of broadening the funding base for the SSC, and so he might be classed as a critic of the project. But Donald Langenberg, the outgoing APS president, says he does not expect this to complicate life much for him because “physicists have never been bashful about expressing their views and disagreeing.” Schrieffer himself stressed the need for achieving greater unity in physics in his candidate’s statement.

“More must be done to reunify our field both intellectually and in its approach to funding sources,” Schrieffer said.

Schrieffer also said physics must find ways of continuing to attract the best and brightest young people, especially by “sharing the excitement of discovery and still maintaining a rigorous educational experience.” He said physicists have “the responsibility to aid our colleagues who work under difficult conditions in developing and distressed countries,” and

M. Garmire, director of the Center for Laser Studies at the University of Southern California and outgoing president of the Optical Society of



Anthony M. Johnson

“the responsibility of maintaining high standards.”

Finally, he said, APS should “enhance the outreach of our field to allied areas in order to provide new challenges and create new job opportunities for our members.”

Schrieffer biography

Best known for his contribution to the Bardeen-Cooper-Schrieffer theory of superconductivity, Schrieffer left a professorship at Santa Barbara two years ago for statewide university appointments in Florida and an office at the newly created National Magnet Lab at FSU, where he is chief scientist (PHYSICS TODAY, July 1991, page 52).

Before moving to Florida, Schrieffer was Chancellor’s Professor at the University of California, Santa Barbara. He served as director of the Institute for Theoretical Physics in Santa Barbara from 1984 to 1989, and from 1988 to 1992 he was director of the high-temperature superconductor theory program at Los Alamos National Laboratory.

Schrieffer previously was on the physics faculties at the University of Pennsylvania, the University of Illinois and the University of Chi-



J. Robert Schrieffer

cago. He is a board member and chairman of the technical advisory board of Superconductor Technologies Inc, a company in Santa Barbara that has concentrated on thallium-based superconductors and thin films. He is chairman of the scientific council of the International Centre for Theoretical Physics in Trieste, Italy.

OPTICAL SOCIETY ELECTS MOORE VICE PRESIDENT

Duncan T. Moore, a professor of optics at the University of Rochester and the president and founder of Gradient Lens Corp in Rochester, New York, is the newly elected vice president for 1994 of the Optical Society of America. Robert L. Byer of Stanford University will be OSA president in 1994, and Tingye Li of AT&T Bell Labs in Holmdel, New Jersey, will be president-elect.

Moore earned his bachelor’s degree in physics at the University of Maine, Orono (1969), and his master’s and doctoral degrees in optics at the University of Rochester (1971 and 1974). He joined the faculty of the Institute of Optics at the University of Rochester in 1974 and became director of the institute in 1987. Concurrently he became director of the Center for Advanced Optical Technology of the New York State Science and Technology Foundation. He was named the Rudolf and Hilda Kinglake Professor of Optical Engineering at Rochester in 1993.

Moore’s main research interests have been gradient-index optics and computer-aided manufacturing and de-

sign. In 1973 he fabricated the first axial-gradient collimating lens, and most recently he and colleagues at Gradient Lens Corp have developed a disposable, gradient-index endoscope relay system with negative dispersion. His work having to do with industrial research in optical manufacturing contributed to the formation of the Center for Optics Manufacturing, a joint project of the University of Arizona, the University of Central Florida, the University of Rochester and more than 80 US companies, which also receives funding from state governments and the US Army.

Moore has been active in OSA affairs since 1979. From 1989 to 1992 he served as editor of *Applied Optics—Optical Technology*. He is the American Physical Society’s Congressional Scientist Fellow in Washington, DC, for 1993–94, and in that capacity he is serving as science adviser to Senator John D. Rockefeller IV, the West Virginia Democrat who succeeded Vice President Al Gore as chair of the Senate science subcommittee.